



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<b>(21) International Application Number:</b> PCT/US99/29760 <b>(22) International Filing Date:</b> 15 December 1999 (15.12.99) <b>(30) Priority Data:</b> 09/236,072                      25 January 1999 (25.01.99)                      US <b>(71) Applicant:</b> SONY ELECTRONICS, INC. [US/US]; 1 Sony Drive, Park Ridge, NJ 07656 (US). <b>(72) Inventors:</b> TOTSUKA, Keiichi; 43 Mariners Cove, Edgewater, NJ 07020 (US). GIOSCIA, Richard; 38 Winding Trail, Mahwah, NJ 07430 (US). SONODA, Yumi; 1022 Soth Springer Road, Los Altos, CA 94024 (US). ZOELS, Jan-Christoph; 33 Flatbush Avenue, Brooklyn, NY 11217 (US). UDAGAWA, Masamichi; 43 West 16th Street #10D, New York, NY 10011 (US). MOESLINGER, Sigi; 43 West 16th Street #10D, New York, NY 10011 (US). <b>(74) Agent:</b> NICHOLS, Steven, L.; Rader, Fishman & Grauer PLLC, Lion Building, Suite 501, 1233 20th Street, N.W., Washington, DC 20036 (US).		<b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i>
<b>(54) Title:</b> METHOD AND APPARATUS FOR PROMOTING MUSIC SALES AND PROVIDING AUDIO CONTENT WITH PRINTED ADVERTISING		
<b>(57) Abstract</b> <p>A card or sheet of printed information contains an electronic memory device (106) or a coded section that can be read by a reader unit (101 or 201). The reader unit outputs an audio file from the memory device (106) or coded section to supplement the printed information. The memory device or coded section may also be linked to an internet site at which more complete or multi-media files are available.</p> <div data-bbox="1079 1176 1453 1963"> </div>		

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TITLE OF THE INVENTION

**Method and Apparatus for Promoting Music Sales and  
Providing Audio Content with Printed Advertising**

FIELD OF THE INVENTION

5       The present invention relates to the field of  
advertising. More specifically, the present invention  
relates to the fields of music promotion and providing audio  
content with printed advertisements.

BACKGROUND OF THE INVENTION

10       In the modern world, the majority of advertising is  
accomplished through television, radio or print. The print  
medium for advertising includes newspapers, magazines,  
flyers, mailers, circulars, etc. Television advertising  
provides both video and audio information to potential  
15 customers, but is by far the most expensive form of  
advertising. Radio is less expensive, but provides only  
audio.

      The various forms of printed advertising can provide  
both text and pictures. Moreover, printed advertising is  
20 inexpensive. Unfortunately, printed advertising is often  
easily ignored and does not spark the interest of potential  
customers. Therefore, there is a need in the art for a  
device and method of increasing reader interest in printed  
advertising. There is a further need in the art to add an  
25 audio component to printed advertising.

      These general needs in the advertising industry are  
echoed in the field of music promotion. Often a potential  
buyer of a music recording has heard one or two selections  
from an artist's album over the radio. However, the  
30 potential buyer may be reluctant to purchase the artist's  
work for fear that the unheard pieces on the album will not  
satisfy the buyer's tastes.

      Alternatively, a potential purchaser may desire to buy  
some new music, but not have any particular purchase in

mind. To make a sale to such a purchaser, a music seller must provide an opportunity for the purchaser to become acquainted with music that that purchaser will appreciate.

5 To address these problems, sellers of music recordings frequently play music in their stores so that potential purchasers can hear more of a particular album or become acquainted with new musical works. However, only one such album can be previewed for customers in this manner at one  
10 time. Therefore, music stores often provide listening stations with headphones and a user interface. Through such a listening station, a potential purchaser may choose to listen to particular albums or samples of new music.

The drawback with these existing methods is the need to  
15 draw the potential customer into the music store or other location where music can be previewed. It would obviously be more advantageous if music could be previewed for potential customers at that customer's convenience without that customer be required to come into the store. Thus,  
20 there is a need in the music promotion field for a device and method of previewing music for potential customers that can be used at any time and location convenient for the potential customer.

#### SUMMARY OF THE INVENTION

25 It is an object of the present invention to meet the above-described needs and others. Specifically, it is an object of the present invention to provide a means and method of supplementing printed advertising material with audio.

30 Additional objects, advantages and novel features of the invention will be set forth in the description which follows or may be learned by those skilled in the art through reading these materials or practicing the invention.

The objects and advantages of the invention may be achieved through the means recited in the attached claims.

To achieve these stated and other objects, the present invention may be embodied and described as a device for  
5 providing audio or supplemental content with printed advertising. The device includes a substrat such as a card or sheet in combination with a memory device. An audio file is stored in the memory device.

If the card or sheet is a card comprising an electronic  
10 memory unit as the memory device, a reader unit is used for receiving the card and making an electrical connection to the memory unit so as to access the audio file. Alternatively, if the card or sheet is a sheet comprising a coded memory strip as the memory device. A different reader  
15 unit is used through which the memory strip is slid. Whereupon, the reader unit reads the coded memory strip so as to access the audio file.

In either case, the reader unit preferably includes an audio output device for making the audio file audible to a  
20 listener. This may be a speaker provided on the reader unit or a jack or connection to external speakers, for example, a pair of headphones.

The present invention also encompasses a device for providing electronic content with printed advertising. This  
25 device includes a card or sheet in combination with a memory device, where an internet address is stored in the memory device. As before, the memory unit may be an electronic device to which a reader is electrically connected, or the memory unit may be a coded strip which is passed through a  
30 reader to access the data stored in the strip.

In either case, the reader unit comprises a transmitter for transmitting the retrieved internet address to a terminal from which the internet site of the address is accessible. The transmitter may be wireless or wire-line.

The present invention also encompasses the methods inherent in using the devices described above. For example, the present invention encompasses a method for providing audio content with printed advertising by storing an audio file in a memory device of a card or sheet; and a method for providing additional content with printed advertising by recording an internet address in an electronically readable memory device on a card or sheet.

#### BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings illustrate the present invention and are a part of the specification. Together with the following description, the drawings demonstrate and explain the principles of the present invention.

Fig. 1 is an illustration of a first embodiment of the present invention.

Fig. 2 is an illustration of a second embodiment of the present invention.

Fig. 3 is an illustration of an expanded system according to the principles of the present invention that incorporates the device shown in either Fig. 1 or Fig. 2.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Using the drawings, the preferred embodiments of the present invention will now be explained.

A first embodiment of the present invention is shown in Fig. 1. As illustrated, a card (105) which incorporates an electronic memory device (106) is provided. The card (105) may be made of any of a variety of equivalent materials, e.g., paper, plastic, cardboard, film, etc. The card (105) bears an electronic memory device (106) that may be, for example, an IC memory chip or a memory module. Additionally, the card (105) may bear printed information including either text or pictures. The printed information on the card (105) may advertise a product or identify information stored in the memory device (106).

The present invention also includes a reader (101) for retrieve the information stored in the electronic memory device (106). The card (105) is inserted into the reader (101) as shown by the arrow in Fig. 1. A window (103) may  
5 be provided to assist in accurately aligning the card (105) in the reader (101). If the window (103) is used, a graphic or icon may be printed on the card (105) so as to be visible through the window (103) when the card (105) is properly aligned and inserted in the reader (101)

10 When the card (105) is inserted into the reader (101), electrical connections are made between the reader (101) and the memory unit (106) on the card. The memory unit (106) contains an audio file. The reader (101) may automatically access the audio file in the memory unit (106) when the card  
15 (105) is inserted. Alternatively, access of the memory unit (106) by the reader (101) may be controlled by a user interface such as a button (104).

The audio file in the memory unit (106) is then output by the reader (101). The reader (101) may incorporate a  
20 speaker for playing the digital audio file. See Fig. 2. Alternatively, the reader (101) may include a jack (102) to which headphones may be connected for listening to the audio file.

The audio file recorded in the card's memory unit (106)  
25 may be an advertising message, for example, a message tied to the printed information on the card (105). Alternatively, the audio file may be a music sample intended to persuade potential purchasers to buy a recording of the music. In this manner, music samples can be widely  
30 distributed to encourage potential purchasers to buy recordings without requiring that the potential purchasers come to the music outlet.

Fig. 2 illustrates a second embodiment of the present invention. As shown in Fig. 2, the card (105) may be

replaced by a sheet (205) which is, again, made of any of a variety of equivalent materials, e.g. paper, plastic, cardstock, cardboard, film, etc.

5 The sheet (205) includes a code strip (204) which is preferably a magnetic strip. However, the strip (204) could alternatively be, for example, a bar code or other data storage device.

10 A reader (201), which functions similar to the reader (101) described above, is used to retrieve audio data from the strip (204). A slot (203) is provided in the reader (201) through which the strip (204) is slid as indicated by the arrow in Fig. 2. Audio data stored on the strip (204) is then read by the reader (201) and output for the user. As shown in Fig. 2, the reader (201) may include a speaker  
15 (202) for playing the audio data of the strip (204). Alternatively, as described in connection with Fig. 1, the player (201) may include a jack to which headphones may be attached.

20 As will be understood by those skilled in the art, the amount of audio data stored on a strip (204) as illustrated in Fig. 2 is limited. Therefore, the audio data stored would preferably be of lower quality, not high-fidelity. Moreover the audio data would most likely be compressed. While this scheme will not allow for high quality music  
25 samples to be distributed, a purchaser may be given a sufficient idea of the sound of the musical piece to be interested in buying or further investigating the work.

30 Any other audio advertising message may also be encoded in strip (204). With the sheet (205), a relatively large amount of printed information maybe given to supplement the audio data encoded in the strip (204).

Fig. 3 illustrates an expanded system according to the present invention that makes use of either of the readers (101 or 201) described above. As noted, the capacity of the



memory unit (106) and, especially, the strip (204) is limited. This problem can be overcome using the system of Fig. 3.

As shown in Fig. 3, a user terminal (301) communicates electronically (303) with the reader (101 or 201) of the present invention. The connection (303) between the terminal (301) and the reader (101 or 201) is preferably a wireless connection such as an infrared, radio frequency or ultrasonic link. However, the connection (303) may also be a wired connection. The necessary transmitter, receiver or connection ports would be provided respectively on the reader (101 or 201) and the terminal (301).

Under the principles of the embodiment of Fig. 3, the memory unit (106) or the strip (204) store an internet address at which a corresponding audio or multimedia file is located. The address is provided over the connection (303) to the terminal (301). The terminal (301) is provided with a connection (302) to the internet over which the addressed file can be accessed. The terminal (301) may include a speaker, a headphone port and/or a display device for outputting the addressed internet file to the user. In this way, the card (105) or the sheet (205) can be associated with an audio file of virtually any size or a web-site with video and audio data.

The preceding description has been presented only to illustrate and describe the invention. It is not intended to be exhaustive or to limit the invention to any precise form disclosed. Many modifications and variations are possible in light of the above teaching.

The preferred embodiment was chosen and described in order to best explain the principles of the invention and its practical application. The preceding description is intended to enable others skilled in the art to best utilize the invention in various embodiments and with various

modifications as are suited to the particular use contemplated. It is intended that the scope of the invention be defined by the following claims.

WHAT IS CLAIMED IS:

1. A device for providing audio content with printed  
advertising comprising a card or sheet in combination with a  
5 memory device, wherein an audio file is stored in said  
memory device.

2. The device of claim 1, wherein said card or sheet  
is a card (105) comprising an electronic memory unit (106)  
as said memory device.

10 3. The device of claim 2, further comprising a reader  
unit (101) for receiving said card (105) and making an  
electrical connection to said memory unit so as to access  
said audio file.

4. The device of claim 1, wherein said card or sheet  
15 is a sheet (205) comprising a coded memory strip (204) as  
said memory device.

5. The device of claim 4, further comprising a reader  
unit (201) through which said memory strip (204) is slid  
whereupon said reader unit (201) reads said coded memory  
20 strip (204) so as to access said audio file.

6. The device of claim 1, further comprising a reader  
unit (101) for accessing said memory device to reproduce  
said audio file, said reader unit (101) comprising an audio  
output device (202) for making said audio file audible to a  
25 listener.

7. A device for providing electronic content with  
printed advertising comprising a card or sheet in  
combination with a memory device, wherein an internet  
address is stored in said memory device.

30 8. The device of claim 7, wherein said card or sheet  
is a card (105) comprising an electronic memory unit as said  
memory device, and further comprising a reader unit for  
receiving said card (105) and making an electrical

connection (303) to said memory unit (106) so as to access said internet address.

9. The device of claim 8, further comprising a transmitter on said reader unit (101) for transmitting said internet address to a terminal (301) from which said internet address can be accessed.

10. The device of claim 7, wherein said card or sheet is a sheet (205) comprising a memory strip (204) as said memory device, and further comprising a reader unit (201) through which said strip (204) is slid so that said reader unit (201) reads said internet address from said strip.

11. The device of claim 10, further comprising a transmitter on said reader unit (201) for transmitting said internet address to a terminal from which said internet address can be accessed.

12. A method for providing audio content with printed advertising comprising storing an audio file in a memory device of a card or sheet.

13. The method of claim 12, wherein said card or sheet is a card (105) comprising an electronic memory unit (106) as said memory device, said method comprising connecting a reader unit (101) to said electronic memory unit (106) so as to access said audio file.

14. The method of claim 12, wherein said card or sheet is a sheet (205) comprising a coded memory strip (204) as said memory device, said method comprising sliding said strip (204) through a port (203) of a reader unit whereupon said reader unit (201) reads said coded memory strip (204) so as to access said audio file.

15. The method of claim 12, further comprising transducing said audio file so as to be audible to a listener with a reader unit (201) for accessing said memory device, said reader unit (201) comprising an audio output device (202).

16. A device for providing additional content with printed advertising comprising recording an internet address in an electronically readable memory device on a card or sheet.

5        17. The method of claim 16, wherein said card or sheet is a card comprising an electronic memory unit (106) as said memory device, said method comprising:

         connecting a reader unit (101) to said electronic  
memory unit (106) so as to access said internet address; and  
10        transmitting said internet address to a terminal from  
which said address can be accessed.

18. The method of claim 16, wherein said card or sheet is a sheet comprising a memory strip (204) as said memory device, said method comprising:

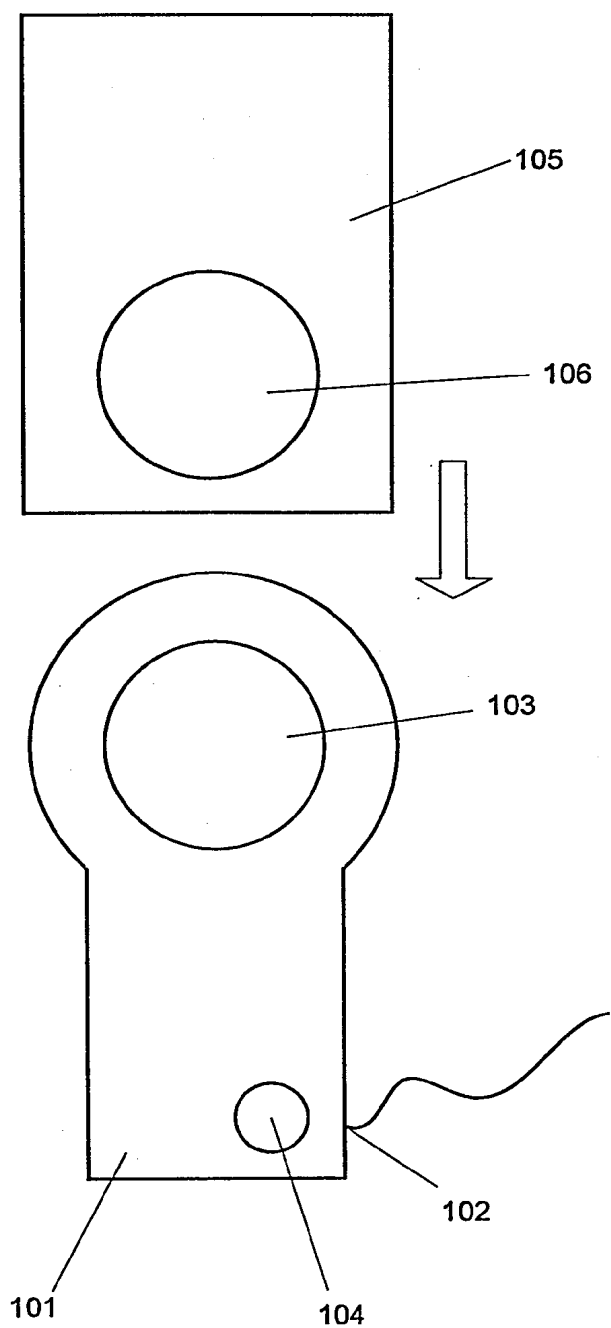
15        sliding said strip (204) across a reader unit (201) so  
as to read said internet address; and

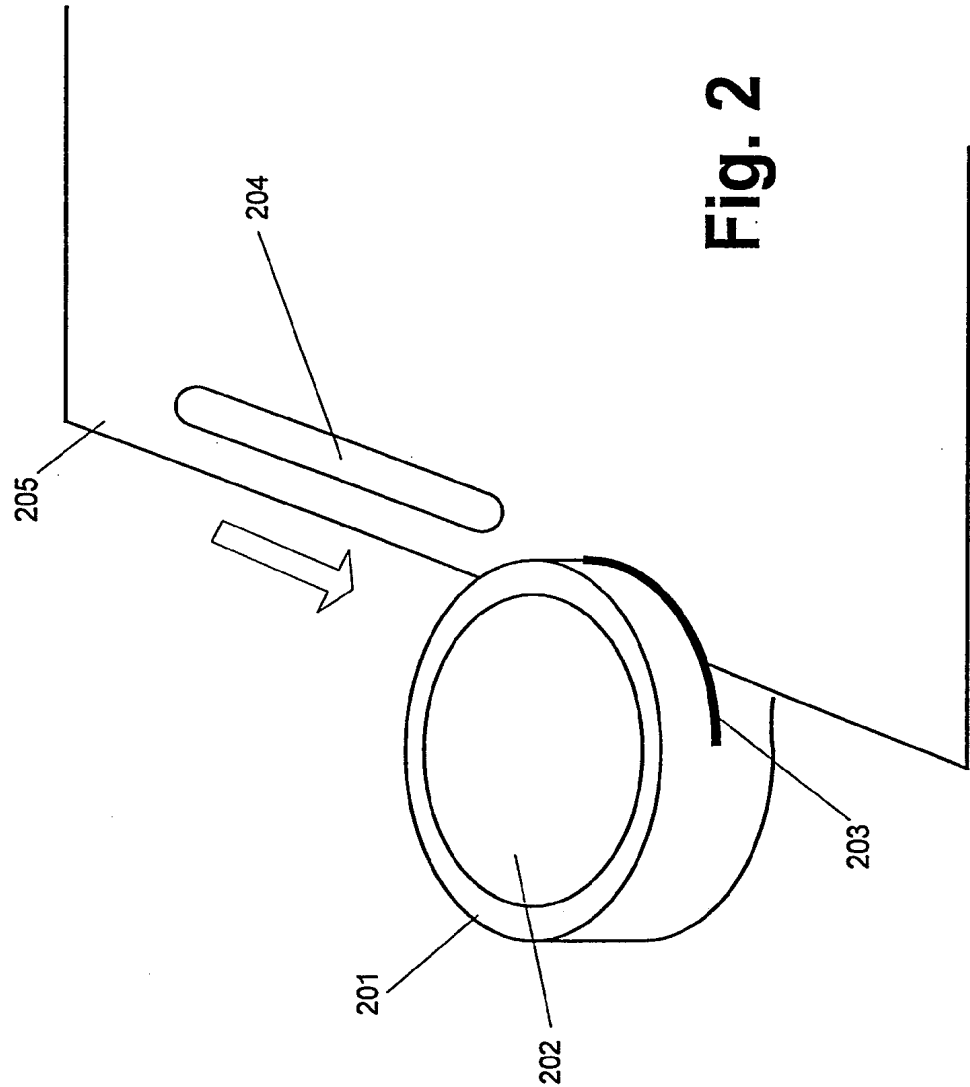
         transmitting said internet address to a terminal from  
which said address can be accessed.

19. A device for providing audio content with printed  
20        advertising comprising a substrate in combination with a  
memory means for storing either an audio file or an internet  
address.

20. The device of claim 19, wherein said memory means  
comprises an electronic memory unit (106), and said device  
25        further comprises a reader means (101) for connecting to and  
reading data stored in said memory unit.

21. The device of claim 19, wherein said memory means  
comprises a coded data strip (204), and said device further  
comprises a reader means (201) for reading said coded data  
30        strip (204) to retrieve said audio file or internet address.





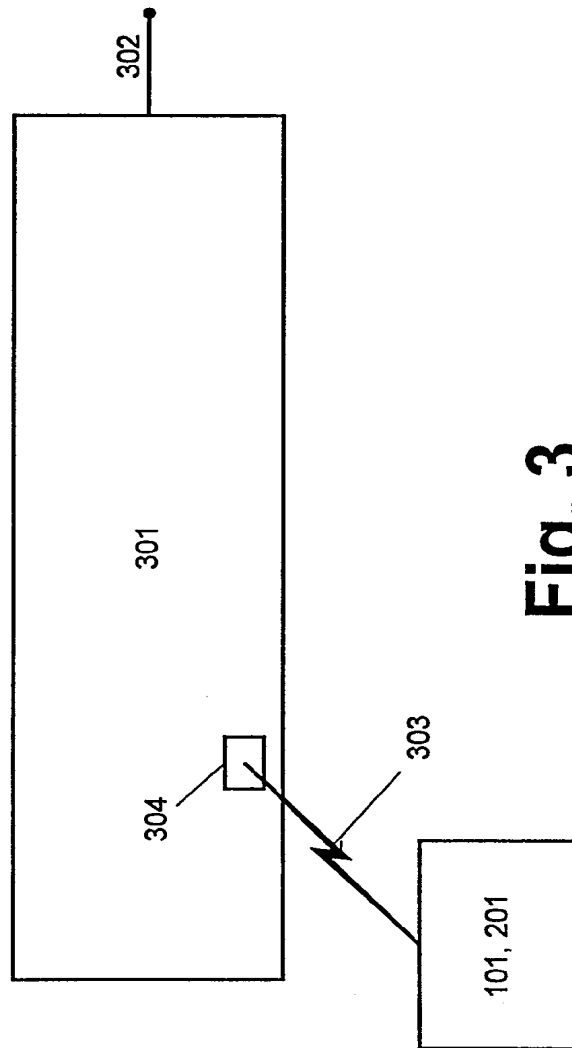


Fig. 3



## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/29760

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 G06K19/07 B42D15/02

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 G06K B42D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y A	<p>US 5 275 285 A (CLEGG TIMOTHY P)            4 January 1994 (1994-01-04)</p> <p>abstract            column 1, line 45 -column 3, line 35            figure 1</p> <p style="text-align: center;">— —/—</p>	<p>1, 2, 12,            19            3-6,            13-15            21</p>

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

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Date of the actual completion of the international search

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## INTERNATIONAL SEARCH REPORT

International Application No.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Information on patent family members

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